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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,455	11/12/2003	Yusaku Fujii	1075.1237	6699
21171	7590	06/14/2007	EXAMINER	
STAAS & HALSEY LLP			KOZIOL, STEPHEN R	
SUITE 700				
1201 NEW YORK AVENUE, N.W.			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/705,455	FUJII, YUSAKU
	Examiner Stephen R. Koziol	Art Unit 2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 4/19/2004.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-27 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-27 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 12 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**SUPERVISORY PATENT EXAMINER**

### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Double Patenting***

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 1, 12, 14, 16, 18, 20, 22, 24, and 26 are objected to under 37 CFR 1.75 as being a substantial duplicates of claims 9, 13, 15, 17, 19, 21, 23, 25, and 27 respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The invention claimed lacks patentable utility.

- i.* The apparatus, methods, and programs outlined in claims 1, 9, and 20-27 respectively describe an abstract idea that produces neither a physical transformation nor a useful, concrete, and tangible result. Hence, claims 1, 9, and 20-27 contain exclusively nonstatutory functional descriptive material. See MPEP 2106: IV(B)(1)(a), last paragraph.
- ii.* Claims 2-8 and 9-19 merely further describe the method outlined in claims 1 and 9 respectively. As such, they do not rectify the lack of patentable utility in claims 1 and 9 and are themselves nonstatutory functional descriptive material. See MPEP 2106: IV(B)(1)(a), last paragraph.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1-4 and 7-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hsu et al., US 6,134,340.

Regarding claim 1 Hsu et al. discloses an organism characteristic data acquiring apparatus, comprising:

- i. a sampling section for sampling a partial image of a portion of an organism (fig 2 item 22, also, col. 2, ln. 13-16);
- ii. a detection section for detecting, every time a partial image is sampled by said sampling section, a relative positional relationship between the partial image and one of other partial images sampled already (fig 2 item 54, also, col. 2, ln. 16-20);
- iii. an extraction section for extracting, every time a partial image is sampled by said sampling section, characteristic portion data including characteristic information unique to the organism portion from the partial image (fig 2 items 46-50, also, col. 2, ln.16-20); and
- iv. a synthesis section for synthesizing, every time a partial image is sampled by said sampling section, the characteristic portion data of the partial image extracted by said extraction section and characteristic portion data of the other

partial image based on the relative positional relationship of the partial image detected by said detection section and outputting a result of the synthesis as organism characteristic data of the portion of the organism (fig 2 items 54-58, also, col. 2, ln. 22-39).

Regarding claim 2 Hsu et al. discloses an organism characteristic data acquiring apparatus wherein said sampling section samples a partial image of a pattern formed from ridge of the portion of the organism (figs 3 and 4 for ridge detection, also, col. 2, ln. 40-51).

Regarding claim 3 Hsu et al. discloses an organism characteristic data acquiring apparatus, wherein said extraction section extracts, as the characteristic portion data, information regarding a characteristic point of the ridge (fig 8 item 60, also, col. 2 ln. 40-51, also, col. 9, ln. 60-67).

Regarding claim 4 Hsu et al. discloses an organism characteristic data acquiring apparatus, wherein said extraction section extracts, as the information regarding a characteristic point of the ridge, at least one of a position, a type and a direction of the characteristic point (fig 8, item 60 and col. 10, ln. 19-30 where information about the position and type of the detected ridge is extracted).

Regarding claim 7 Hsu et al. discloses an organism characteristic data acquiring apparatus, wherein said extraction section extracts, as the characteristic portion data, a position of a ridge end which is at an end of the partial image (fig 8 item 60, col. 10, ln. 44-76).

Regarding claim 8 Hsu et al. discloses an organism characteristic data acquiring apparatus, wherein said extraction section extracts, as the characteristic portion data, information of a connectional relationship between the characteristic point and the ridge end (fig 8 item 60, col. 10, ln. 44-76).

Regarding claim 9 Hsu et al. discloses an organism characteristic data acquiring apparatus, comprising:

- i. a sampling section for sampling a partial image of a pattern formed from a ridge on a portion of an organism (fig 2 item 22, fig 3-4 for ridge detection and extraction, also, col. 2 ln. 13-16);
- ii. a detection section for detecting, every time a partial image is sampled by said sampling section, a relative positional relationship between the partial image and one of other partial images sampled already (fig 2 items 46-54, also, col. 2 , ln. 16-20);
- iii. an extraction section for extracting, every time a partial image is sampled by said sampling section, ridge structure data including characteristic information unique

to the organism portion from the partial image (fig 2 items 46-54, fig 3-4 for ridge detection and extraction, also, col. 2, ln. 16-20, and col. 2 ln. 40-51); and

iv. a synthesis section for synthesizing, every time a partial image is sampled by said sampling section, the ridge structure data of the partial image extracted by said extraction section and ridge structure data of the other partial image based on the relative positional relationship of the partial image detected by said detection section and outputting a result of the synthesis as organism characteristic data of the portion of the organism (fig 2 items 54-58, fig 3-4 for ridge detection and extraction, also, col. 2, ln. 22-39, and col. 2 ln. 40-51).

Regarding claim 10 Hsu et al. discloses an organism characteristic data acquiring apparatus, wherein said extraction section extracts, as the ridge structure data, a skeleton line image obtained by thinning the image of the ridge (figs 3-4, also, col. 2, ln. 40-51).

Regarding claim 11 Hsu et al. discloses an organism characteristic data acquiring apparatus, wherein said extraction section extracts, as the ridge structure data, a binary image obtained by binarizing the image of the ridge (figs 3-4, also, col. 2, ln. 40-51, also, col. 8, ln. 10-48, where the binarizing is further disclosed).

Regarding claim 12 Hsu et al. discloses an organism characteristic data acquiring apparatus, wherein said detection section detects, as the relative positional relationship,

a positional relationship of superposition between the partial image and the other partial image such that ridges same as each other in the partial image and the other partial image are smoothly connected to each other (fig 2 item 54, also, col. 2, ln. 22-35, and col. 4, ln. 10-48).

Claim 13 has been analyzed and is rejected for the reasons outlined in claim 12 supra as there are no substantial differences between the limitations in claims 12 and 13.

Regarding claim 14 Hsu et al. discloses an organism characteristic data acquiring apparatus, wherein said detection section detects, as the relative positional relationship, a corresponding relationship of the ridges same as each other in the partial image and the other partial image (fig 2 items 54-56, fig 8 item 60, also, col. 2 ln. 40-51).

Claim 15 has been analyzed and is rejected for the reasons outlined in claim 14 supra as there are no substantial differences between the limitations in claims 14 and 15.

Regarding claim 16 Hsu et al. discloses an organism characteristic data acquiring apparatus, wherein said sampling section samples the partial image by replacing the organism portion on a sampling face by a plural number of times for sampling a partial image, and wherein characteristic portion data regarding a partial image, having an area which has a side shared by or overlaps with at least one of the other partial images, from among a plurality of partial images sampled by said sampling section is used as an

object of the synthesizing process by said synthesis section (fig 2 item 50-56, col. 2, ln. 22-35, also, col. 2, ln. 52-67).

Claim 17 has been analyzed and is rejected for the reasons outlined in claim 16 supra as there are no substantial differences between the limitations in claims 16 and 17.

Regarding claim 18 Hsu et al. discloses an organism characteristic data acquiring apparatus, wherein said sampling section samples the partial image while the organism portion is relatively moved with respect to a sampling face for sampling a partial image, and wherein characteristic portion data regarding a partial image, having an area which has a side shared by or overlaps with at least one of the other partial images, from among a plurality of partial images sampled by said sampling section is used as an object of the synthesizing process by said synthesis section (fig 2 item 50-56, col. 2, ln. 52-67).

Claim 19 has been analyzed and is rejected for the reasons outlined in claim 18 supra as there are no substantial differences between the limitations in claims 18 and 19.

Claim 20 has been analyzed and is rejected for the reasons outlined in claim 1 supra as there are no substantial differences between the limitations in claims 20 and 1.

Claim 21 has been analyzed and is rejected for the reasons outlined in claim 9 supra as there are no substantial differences between the limitations in claims 21 and 9.

Claim 22 has been analyzed and is rejected for the reasons outlined in claim 1 supra as there are no substantial differences between the limitations in claims 22 and 1 despite those limitations manifesting in method form.

Claim 23 has been analyzed and is rejected for the reasons outlined in claim 9 supra as there are no substantial differences between the limitations in claims 23 and 9 despite those limitations manifesting in method form.

Claim 24 has been analyzed and is rejected for the reasons outlined in claim 1 supra as there are no substantial differences between the limitations in claims 24 and 1 despite those limitations manifesting in program form.

Claim 25 has been analyzed and is rejected for the reasons outlined in claim 9 supra as there are no substantial differences between the limitations in claims 25 and 9 despite those limitations manifesting in program form.

Claim 26 has been analyzed and is rejected for the reasons outlined in claim 1 supra as there are no substantial differences between the limitations in claims 26 and 1 despite those limitations manifesting in program form.

Claim 27 has been analyzed and is rejected for the reasons outlined in claim 9 supra as there are no substantial differences between the limitations in claims 27 and 9 despite those limitations manifesting in program form.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in ***Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966)***, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: (See ***MPEP Ch. 2141***)

- a. Determining the scope and contents of the prior art;
- b. Ascertaining the differences between the prior art and the claims in issue;
- c. Resolving the level of ordinary skill in the pertinent art; and
- d. Evaluating evidence of secondary considerations for indicating obviousness or nonobviousness.

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. further in view of Morita et al. US 4,827,527.

Regarding claims 5-6 Hsu et al. fails to disclose that the organism characteristic data acquiring apparatus, wherein said extraction section extracts, as the characteristic portion data, a position or number of sweat glands which exists on or between the characteristic points of the ridge. However, Morita et al. discloses an extraction section which extracts, as the characteristic portion data, a position or number of sweat glands which exists on or between the characteristic points of the ridge within an organism characteristic data acquiring apparatus (Morita et al. col. 3, ln. 30-45). Therefor the combined teachings of Hsu and Morita would have rendered obvious utilization of an

extraction section that extracts, as the characteristic portion data, a position or number of sweat glands that exists on or between the characteristic points of the ridge within an organism characteristic data acquiring apparatus.

***Examiner's Note***

7. The referenced citations made in the rejection(s) above are intended to exemplify areas in the prior art document(s) in which the examiner believed are the most relevant to the claimed subject matter. However, it is incumbent upon the applicant to analyze the prior art document(s) in its/their entirety since other areas of the document(s) may be relied upon at a later time to substantiate examiner's rationale of record. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). However, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

**Contact**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Koziol whose telephone number is (571) 270-1884. The examiner can normally be reached on M - alt. F 8:00-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is (571) 273-7332.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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